Stellingen

Behorende bij het proefschrift

MATERIAL STRUCTURE AND FUNCTIONALITY IN PRODUCT MANUFACTURING

door

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01. Development of the performance of materials in practice is an ongoing interplay of processing, structure and functionality. *(Chapters 1 - 4)*

02. In contrast to the accepted view in literature, product shape change of AISI 420 steel may occur at much lower temperatures than the temperatures at which phase transformations occur. *(Chapter 3)*

03. The crystallography of a surface grain has a predominant influence on the microstructure and chemical composition of its oxide layer. *(Chapters 4 & 6)*

04. Interphase boundaries do not move continuous in time, but in a jerky-type fashion. *(Chapter 5)*

05. Two different phases may share an interface. However, an interface is not necessarily an interphase. *(Chapter 5)*

06. Recovery of a steel passive layer can be monitored in detail by Atomic Force Microscopy. *(Chapter 6)*

07. Van meer meten, komt minder weten.

08 Van meer maken, komen meer zaken. (*Jeff De Hosson*)

09. Complex questions require simple experiments, but complex experiments should answer the basic questions in physical sciences.

10. “A metal oxide may look, feel or even taste as a metal, it certainly is not a metal.” *(Jeff De Hosson)*